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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,102	09/08/2003	Len Gould	004	7061

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06/14/2005

Mr. Len C. Gould
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CANADA

EXAMINER

NGUYEN, HOANG M

ART UNIT PAPER NUMBER

3748

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/656,102

Applicant(s)

GOULD, LEN

Examiner

Hoang M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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Claims 1-9 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. Note the format of the claims in the patent(s) cited.

Several claimed elements do not have clear antecedent basis. For example, the phrase "the turbine" on line 1 of claim 1, the phrase "the vapor generator" on line 2 of claim 1.

Claims 5-6, 8-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It's unclear to the Examiner which elements in the specification/drawings are referred to many claimed elements including "a passive primary or secondary cooling system", "a heat exchanger", "a reactor containment vessel", "a large reservoir of emergency coolant" as recited in claims 5-6, 8-9. Please point out the elements using reference numerals. Applicant is reminded that the vocabularies should be consistent used in specification and in the claims. Are those elements shown in figure 2 of this application? If yes, please explain how

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the system in figure 2 is combined with other power plants in figures 3-5. Also, what is the "candu" in claim 9?

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4255933 (Bailey et al). BAiley discloses a geothermal power plant having a Rankine cycle configuration comprising a vertical separation between a steam generator using geothermal heat, a steam turbine power station 8, a condenser 6, many more hydro power devices at 10, 7.

Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by US 4851183 (Hampel).

Hampel discloses a power plant comprising nuclear reactor vessel 10 located underground, a coolant reservoir having many coolant tubes 180.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

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said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-6, 8-9, are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 4255933 (Bailey et al) in view of U.S. 4851183 (Hampel). Bailey et al discloses all the claimed subject matter as set forth above in the rejection of claim 1, but does not disclose a nuclear reactor vessel with coolant reservoir. Hampel discloses a power plant comprising nuclear reactor vessel 10 located underground, a coolant reservoir having many coolant tubes 180. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide a nuclear reactor vessel with coolant reservoir in Bailey et al as taught by Hampel for the purpose of being able to use nuclear energy to generate electricity.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Janner and Schwarzer et al disclose underground power plants using nuclear energy to generate electricity.

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Nguyen whose telephone number is (571) 272-4861. The examiner can normally be reached on Tuesday--Friday from 12:30 AM to 10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion, can be reached on (571)-272-4859. The fax phone number for the Examiner is (703) 872-9306 for regular communication, and (703) 872-9303 for after final communication.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-3700.

Handwritten signature of Hoang Nguyen and the date 06/09/05.

HOANG NGUYEN
PRIMARY EXAMINER
ART UNIT 3748

Hoang Minh Nguyen
6/9/05